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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,532	06/03/2005	A Christian Tahan	GQUANTA-101	4780

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EXAMINER	
AWAI, ALEXANDRA F	
ART UNIT	**PAPER NUMBER**
3663	

DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/537,532	TAHAN, A CHRISTIAN	
	Examiner	Art Unit	
	Alexandra Awai	3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 June 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03 June 2005* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-16 have been examined.

Specification

2. The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. The specification is objected to under 35 U.S.C. 112, first paragraph as failing to provide an adequate written description of the invention and as failing to adequately teach how to make and/or used the invention, i.e. failing to provide an enabling disclosure. There are many factors recognized by the MPEP that are to be considered when determining whether there is insufficient evidence to support a determination that a disclosure satisfies the enablement requirement, including the nature of the invention, the level of predictability in the art and the existence of working examples. See MPEP 2164.01(a). The examiner has the initial burden of challenging an asserted utility. Once the examiner has provided evidence showing that one of ordinary skill in the art would reasonably doubt the asserted utility of the invention, the burden shifts to the applicant to provide rebuttal *evidence*. See MPEP 2164.07(B). It is considered by the examiner that the invention of the present application is lacking in utility because it relies on phenomena

that are not proven and/or are contrary to the current understanding of physics and because, even if it were possible to practice the invention, the applicant has not described the apparatus used to implement it in sufficient detail to enable a skilled artisan to make and use it without undue experimentation.

The nature of the invention rests on certain basic concepts, including the following: 1) that protons can be made to decay via artificially induced β^+ decay, 2) that this decay leads to energy release in the form of any of fusion, a gravity wave and particle-antiparticle annihilation, and 3) that the energy may be harnessed for myriad useful purposes. The applicant claims that the acceleration of unbound proton decay to 360 seconds per event has been shown experimentally (specification, p. 2) and that gravity waves (i.e., gravitons) and anti-gravity have been observed (pp. 3 and 15), along with positron + antiproton annihilation (p. 22). However, there is no evidence of record to indicate that the "Explanation of the Phenomenon" (pp. 27+) is anything more than unfounded conjecture, as it is not based on either rigorous mathematical proof or credible experimental evidence, and because it directly contradicts accepted science (e.g., applicant has suggested that bodies with larger mass fall to earth more quickly than bodies with smaller mass – p. 31).

The decay of a proton as described by the applicant is essentially its fission into its constituent parts. The mass of an atom having multiple nucleons is less than the sum of the masses of the individual nucleons. The energy associated with this "missing mass" is the binding energy. Positive energy from an external source is required to disassemble the nuclear constituents. However, binding energy does not increase uniformly with atomic number (See Knief, p. 30). These facts are logically and experimentally inseparable from the existence of the

fission process. That is, some of the fragments resulting from the fission of a heavy nucleus (mass number > ~60) may be more tightly bound than the parent nucleus – resulting in a release of energy, but the fission fragments of a light nucleus (mass number < ~60, including the proton) will be *less stable and less tightly bound* than the parent nucleus, and therefore there will *not* be a net energy release after a fission reaction. In other words, the proton as a body of mass will not fission into a neutron, positron, neutrino and excess energy because the neutron is actually heavier than the proton itself. The decay scheme posited by the inventor actually only occurs inside nuclei when the binding energy of the mother nucleus is lower than that of the daughter nucleus (e.g., $_{11}Na \rightarrow {}_{10}Ne + e^{+} + \nu_e$). The decay of a free proton has only been theorized, but the most likely mode is $p \rightarrow \pi^0 e^{+}$ (Donoghue et al., Table 1), wherein the pion (π^0) would instantaneously decay into gamma radiation – note that gravitons are conspicuously absent. In contrast, the decay of a free neutron (such as the one that would be created according to the inventor's theory) is known to occur spontaneously on the order of minutes, the only possible decay products including a proton, an electron and an antineutrino – note that gluons are conspicuously absent. It is not clear how either the magnetic field or extremely low frequency electromagnetic waves (extremely low frequency indicating extremely low energy content) can impart enough energy to the proton to spontaneously produce the additional mass needed to create a neutron from a proton. Finally, it seems highly implausible that a gravity wave created from the decay of a proton can have an energy of 1.11×10^4 GeV, when the rest mass of a proton is just 938.27 MeV.

As presently set forth, the 2 Hz source (Fig. 3, 44) is essentially a "black box" with no description of the internals thereof. The disclosure is insufficient in failing to set forth in an

adequate and sufficient fashion, what the 2 Hz source comprises and how it operates. If the applicant is of the opinion that there is a description in the prior art (in the form of literature, etc. having a date prior to the filing date of this application) of the internals of this black box, copies of said literature, etc. must e submitted for appropriate review by the Office. See *In re Ghiron et al.*, 169 USPQ 723, 727. Similarly, there is no indication of how the preferred magnetic field is applied using by the north (32) and south (34) poles of pictured magnet. It is not clear why the copper sink (36) will spontaneously absorb electrons, or why this would be necessary given how mobile protons would be in a container of pure sulfuric acid. Moreover, it is not clear how the sulfuric acid could have electrons and protons removed, and yet still remain sulfuric acid as shown in the figures. It is noted that uses for the energy allegedly produced by the invention include, but are not limited to the following:

- Creating new elements for the periodic table (p. 3),
- Producing energy output five orders of magnitude greater than a fission reactor using 2 mL of sulfuric acid, an antenna and a magnet (p. 9),
- Increasing the mass of objects by allowing gravity waves to impinge upon them (p. 10),
- Developing quantum computing systems that avoid the limit of the speed of light (p. 11),
- Achieving genetic engineering by stimulating a body with gravity waves (p. 12),
- Using gravity waves to eliminate the need for transplants (p. 13),
- Creating materials ranging from new bacteria to diamonds (p. 13),
- Making rain fall from clouds (p. 21), and
- Eliminating diseased cells by altering the passage of time (p. 39).

Although these uses and devices are not claimed, it is noted for future reference that the specification does not provide a written description sufficient to enable them.

As stated in MPEP § 2164.03, the amount of guidance or direction needed to enable the invention is inversely related to the amount of knowledge in the state of the art as well as the predictability in the art. *In re Fisher,* 427 F2d 833, 839, 166 USPQ 18, 24 (CCPA 1970). The art of the present invention (i.e., energy generation by proton decay) is so new that it cannot be considered to have a body of knowledge associated with it, much less predictability of results (see *Chiron Corp. v. Genentech Inc., 363* F.3d 1247, 1254, 70 USPQ 2d 1321, 1326 (Fed. Cir. 2004)). Applicant has only provided data that is based upon questionable science, and so that data is also questionable until such time that applicant rigorously proves that the applied concepts were plausible and the data statistically sound. Since Applicant has not established the operability of the presently claimed invention as discussed, it is considered that the invention is lacking in utility. Given the state of the art as discussed herein, it would be unreasonable to expect one skilled in the art to be able to make and use the claimed invention without undue experimentation

It is well established that where, as here, the utility of the claimed invention is based upon allegations that border on the incredible or allegations that would not be readily accepted by a substantial portion of the scientific community, ***sufficient substantiating evidence*** of operability must be submitted by applicant. Note *In re Houghton*, 167 U.S.P.Q. 687 (CCPA 1970); *In re Ferens*, 163 U.S.P.Q. 609 (CCPA 1969); *Puharich v. Brenner*, 162 U.S.P.Q. 136 (CA DC 1969); *In re Pottier*, 152 U.S.P.Q. 407 (CCPA 1967); *In re Ruskin*, 148 U.S.P.Q. 221 (CCPA 1966); *In re Citron*, 139 U.S.P.Q. 516 (CCPA 1963); and *In re Novak*, 134 U.S.P.Q. 335 (CCPA 1962).

Simply stating that the concepts the inventor espouses are correct is not sufficient substantiating evidence. Sufficient substantiating evidence may be based on widely accepted scientific concepts (e.g., quantum mechanics), a working model, or a supporting opinion in a widely respected and peer-reviewed publication.

It is thus considered that the examiner has set forth a reasonable and sufficient basis for challenging the adequacy of the disclosure. The statute requires the applicant itself to inform, not to direct others to find out for themselves; *In re Gardner et al*, 166 U.S.P.Q. 138, *In re Scarbrough*, 182 U.S.P.Q. 298. Note that the disclosure must enable a person skilled in the art to practice the invention without having to design structure not shown to be readily available in the art; *In re Hirsch*, 131 U.S.P.Q. 198.

Drawings

5. Fig. 11B is objected to because the lines indicating counts are blurred and indistinct. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

6. Claim 2 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim, or amend the claim to place the claim in proper dependent form, or rewrite the claim in independent form. All nuclei include protons.

Claim Rejections - 35 USC § 112

7. Claims 1-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention as discussed in section 4 of this Office Action.

8. Claims 1-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim contains subject matter that was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which

it is most nearly connected, to make and/or use the invention as discussed in section 4 of this Office Action.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "room temperature" in claims 1, 8 and 11 is a relative term which renders the claim indefinite. The terms "adjacent" and "proximate" in claims 1, 8, 12 and 13 are similarly indefinite. The terms are not defined by the claims, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The term "extreme low frequency period radiation" is indefinite because it is unclear what type of radiation is being used and what is considered extreme low frequency. The magnitude of energy in claim 16 is indefinite because the volt is not a unit of energy.

Claims 1, 8 and 10-13 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements include those components needed to create the magnetic field, locate or place nuclei (protons) in the field and, with respect to particular claims, maintain the proton at room temperature. There is insufficient antecedent basis for certain limitations in the claims, including but not necessarily limited to the following: magnetic field, radiation, antenna, volume of H_2SO_4, and wire. There must be antecedent basis –

in the preamble, for example – for all structures in method claims that are not unequivocally inherent to any apparatus that might conceivably exercise the method.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-8 and 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Boettner et al.

Insofar as the listed claims particularly point out and distinctly claim the subject matter the applicant regards as the invention, they are anticipated by the teachings of Boettner et al. Boettner et al. discloses placing an objective lens (21), which comprises nuclei and protons, in a magnetic field using permanent magnets (23). The objective lens and the nuclei and protons therein are subjected to 2 Hz waves by electromagnetic voice coils (22 and 24) (col. 5, lines 37-41). Confocal microscopes must be used in rooms, due to the sensitive nature of the measurement and the radiation used, and so the process of using the device is carried out at room temperature. If the proton decay process works as argued by the inventor, then the device disclosed by Boettner et al. inherently functions in the same way as the present invention, and cannot be prevented from causing the production of energy, the room temperature decay of a proton, the production of a gravity wave, the production of room temperature fusion or particle-antiparticle annihilation. With regard to claims 3, 12 and 13, the 2 Hz wave of Boettner et al.

anticipates the claimed frequency (1-3 Hz) of the periodic radiation, as per MPEP § 2131.03, which states:

> "[W]hen, as by recitation of ranges or otherwise, a claim covers several compositions, the claim is 'anticipated' if one of them is in the prior art." *Titanium Metals Corp. v. Banner*; 778 F.2d 775, 227 USPQ 773.

As to limitations which are considered to be inherent in a reference, note the case law of *In re Ludtke*, 169 USPQ 563, *In re Swinehart*, 168 USPQ 226, *In re Fitzgerald*, 205 USPQ 594, *In re Best et al.*, 189 USPQ, and *In re Brown*, 173 USPQ 685, 688.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexandra Awai whose telephone number is (571) 272-3079. The examiner can normally be reached on 9:30-6:00 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on (571) 272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AA
March 20, 2006

JACK KEITH
SUPERVISORY PATENT EXAMINER